

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte VINOD MENEZES

Appeal No. 1999-0016
Application 08/638,071

ON BRIEF

Before HAIRSTON, FLEMING, and HECKER, Administrative Patent Judges.

FLEMING, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 12, all the claims pending in the present application.

The invention relates to a method and system for processing speech or image data using lossy techniques. Appellant discloses on page 1 of the specification that

conventional image and speech processing techniques use complex digital logic. Appellant points out that the use of digital logic which employs very precise arithmetic processing is not always needed in every speech and image processing/compression application. Appellant points out that simple analog devices and/or circuits can be used with some amount of signal loss/noise without adversely affecting the results of processing/compression. Appellant discloses on page 5 of the specification that figure 2a shows a data compression system in accordance with the present invention. The system shows a transformation module with analog devices 22, a quantization module with analog devices 24 and an entropy coding module 26.

Independent claim 1 is reproduced as follows:

1. An [sic A] data compression system comprising:

collector means for collecting said data;

a transformer coupled to said collector means for transforming said data to generate transform coefficients, said transformer implemented using analog devices;

a quantizer coupled to said transformer for quantizing said transform coefficients to generate quantized coefficients, said quantizer implemented using analog devices; and

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an encoder coupled to said quantizer for encoding said quantized coefficients to generate compressed data.

The Examiner relies on the following references;

Merola et al. (Merola)	4,288,858	Sept. 8,
1981		
Blaschke	4,335,444	Jun. 15,
1982		
Chiang	5,126,962	Jun. 30,
1992		
Agranat et al. (Agranat)	5,619,444	Apr.
8, 1997		

(Filed June 20,
1994)

Claims 1 and 4 through 7 stand rejected under 35 U.S.C.

§ 103 as being unpatentable over Appellant's figures 1a and 1b in view of either Chiang or Merola. Claims 2, 3 and 8 through 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Appellant's figures 1a and 1b in view of Chiang or Merola and further in view of either Blaschke or Agranat.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the brief and answer for the respective details thereof.

OPINION

1. We will not sustain the rejection of claims 1 through 12 under 35 U.S.C. § 103.

The Examiner has failed to set forth a *prima facie* case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. **In re Sernaker**, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." **Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.**, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), **cert. denied**, 519 U.S. 822 (1996), **citing W. L. Gore & Assoc., Inc. v. Garlock, Inc.**, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), **cert. denied**, 469 U.S. 851 (1984).

On pages 7 and 8 of the brief, Appellant argues that neither the Appellant's figures 1a and 1b, Chiang nor Merola

teaches or suggests analog devices for quantization.

Appellant argues that Appellant's claim 1 calls for a quantizer implemented using analog devices which would not be obvious in view of Chiang or Merola or the prior art in figures 1a and 1b since this is not taught or suggested in these references. Appellant further points out that all the independent claims recite this limitation.

On page 5 of the answer, the Examiner responds by stating that it is noted that the actual "quantization using analog devices" limitation is not expressly shown in Chiang or Merola. The Examiner argues that this limitation is implicitly disclosed since the coder shown in figure 1 of Chiang must have analog devices for processing the analog signal from the transform device 20. The Examiner further argues that Merola implicitly teaches "quantization using analog devices" in that the processor shown in figure 4 receives and provides analog signals.

As pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.2d 1362, 1369, 47

USPQ2d 1523, 1529 (Fed. Cir. 1998).

We note that all the independent claims recite "quantizer implemented using analog devices." Turning to Appellant's specification, we find that the Appellant discloses throughout the specification that the quantization module shown in figure 2a is implemented entirely with analog devices. Appellant has pointed out the advantages of using the analog devices to implement this function. In particular, Appellant points out on pages 7 and 8 that the analog circuits are simpler than the digital circuits and can provide some amount of syhchronization. Therefore, we find that Appellant is claiming a quantizer coupled to the transformer for quantizing the transformation coefficients using analog devices to generate quantizer coefficients.

Turning to the prior art recited by the Examiner, we find that Chiang and Merola disclose digital circuits for providing these functions. We fail to find that either Chiang or Merola teaches or would have suggested using analog devices to provide a quantizer for quantizing the transformation

coefficients to generate quantized coefficients. Furthermore, we fail to find that Blaschke or Agranat teaches or would have suggested this limitation.

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." ***In re Fritch***, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), ***citing In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). It is further established that "[s]uch a suggestion may come from the nature of the problem to be solved, leading inventors to look to references relating to possible solutions to that problem." ***Pro-mold & Tool Co. v. Great Lakes Plastics, Inc.***, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), ***citing In re Rinehart***, 531 F.2d 1048, 1054, 189 USPQ 143, 149 (CCPA 1976) (considering the problem to be solved in a determination of obviousness). The Federal Circuit reasons in ***Para-Ordnance Mfg. Inc. v. SGS Importers Int'l Inc.***, 73 F.3d 1085, 1088-89, 37 USPQ2d 1237, 1239-40 (Fed. Cir. 1995), ***cert.***

denied, 519 U.S. 822 (1996), that for the determination of obviousness, the court must answer whether one of ordinary skill in the art who sets out to solve the problem and who had before him in his workshop the prior art, would have been reasonably expected to use the solution that is claimed by the Appellants. However, "[o]bviousness may not be established using hindsight or in view of the teachings or suggestions of the invention." **Para-Ordnance Mfg. v. SGS Importers Int'l**, 73 F.3d at 1087, 37 USPQ2d at 1239, **citing W.L. Gore & Assoc., Inc. V. Garlock, Inc.**, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13. In addition, our reviewing court requires the PTO to make specific findings on a suggestion to combine prior art references. **In re Dembiczak** 175 F.3d 994, 1000-01, 50 USPQ2d 1614, 1617-19 (Fed. Cir. 1999).

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We fail to find that the Examiner has established a ***prima facie*** case of obviousness. Therefore, in view of the foregoing, we will not sustain the Examiner's rejection of claims 1 through 12 under 35 U.S.C. § 103.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	
)	BOARD OF PATENT
MICHAAEL R. FLEMING)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
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STUART N. HECKER)	
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